

ABSTRACT

A connection in an optical communication system is routed over a sequence of cross-connects and aggregated links comprising multiple links. A different link selection algorithm is used for service provisioning than is used for restoration, i.e., after a cable cut or other failure or incident has made one or paths in the network suddenly unavailable. In particular, a special link selection algorithm called the Interleave algorithm is used for restoration different from the well known Best-Fit algorithm used for provisioning. The Interleave algorithm substantially reduces the probability of glare while maintaining near-optimum capacity utilization.